

BRYOPHYTAE INDOSINICAE.—XXIII.

A Preliminary Contribution to the Knowledge of the
Coastal Southern Bryoflora of Cambodia

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S U M M A R Y

The lists contains 48 species of Mosses and 43 of Liverworts collected in the low maritime region in Cambodia.

The author gives the lists of his collections in the South of Cambodia in the years 1968-1969. The actual situation in this country forbids, now, botanical researches, and this paper may be completed later. The coast of khmer maritime provinces belong to the region of South China Sea (Nanyang in chinese, the colorful South). This region includes South Indochina, the wet part of Peninsular Thailand, Malaya, southern Sumatra, western Java, Sarawak and Sabah. It is very interesting from a botanical point of view, particularly for its endemism known in the Phanerogams and in the Cryptogams. The author gives for example, the case of *Dipterocarpus gracilis* (*cf. SYMINGTON*) found in Malaya, Borneo and Cambodia and that of *Tuyamaella angulistipa* (Lejeuneaceae) present in the same region. Furthermore the forest biocenoses are the same around the coasts of the Southern China Sea. The best known example is the lowland forest with coniferous trees found in the surroundings of Kompong Som in the Kampot province and also on the coast of Borneo (*KOSTERMANS loc. cit.*).

On the ecological side, the region is characterized by an equatorial climate with heavy rainfalls throughout all the year. On the coast of Thailand Gulf from the Thai border to the town of Kampot it may be found rainfalls with a mean of 3000 mm/year and a peak of more 4000 mm at Sihanoukville in the foot of the Elephant Mountain.

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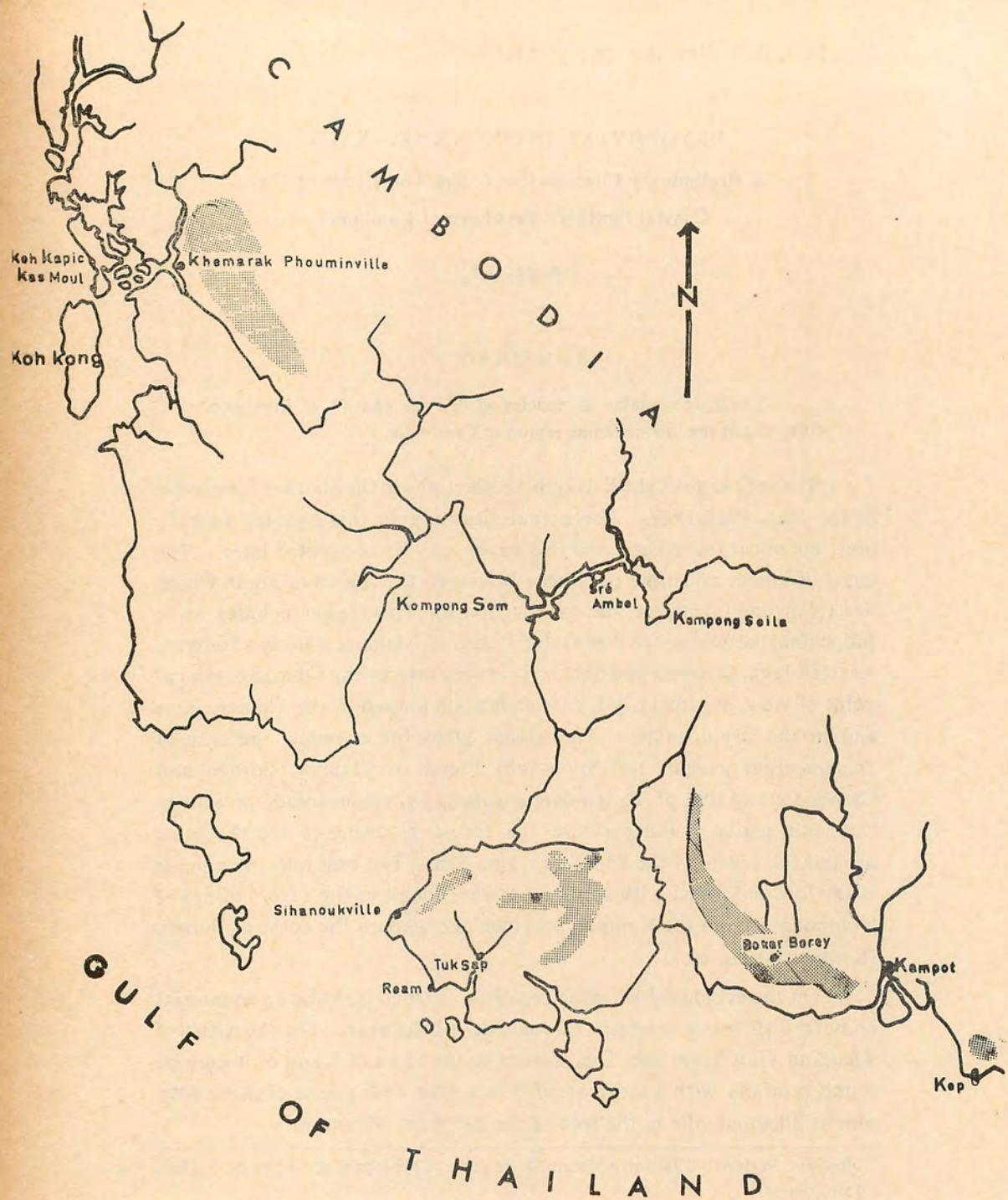


Fig. 1. Map showing sites of collections.

The eastern and southern part of Malaya is also very rainy and the heaviest rains in Sarawak were observed in the South with about 3000 mm/year. The bryoflora of the Cambodian coastal wet regions remain important and interesting. For the Mosses, the region has a bornean approach (*Cladodonthus* is only known on the continent at Bokor hill resort) and the author observed the most northern station of *Syrrhopodon croceus* near Tuk Sap. For the Hepaticas on the other side, an important epiphyllous bryoflora was found. An endemic of Southern China Sea is *Cololejeunea siamensis* St., described from Koh Chang in Thailand and common at Sré Ambel (Srae Ambel) in the bottom of Kompong Som Gulf.

I. MOSES

1. *Fissidens ceylonensis* Doz. & Molk.

Koh Kong, Sré Ambel Hill, on trunk in evergreen forest, 50 m, 9-XI-1969, Tix. No. 4516.

India and South East Asia.

2. *Fissidens mittenii* Par.

Kampot, Tuk Sap, on path in evergreen forest, 20 m, 3-V-1968, Tix. No. 3844. Ceylon, Thailand, Vietnam, Cambodia, Singapore, Luzon, Polillo, Java, Sumatra.

3. *Fissidens sylvaticus* Griff.

Koh Kong, Koh Kapic, on Wat wall, 2 m, 16-II-1969, Tix. No. 4328. South East Asia till Hong Kong and New Caledonia.

4. *Campylopus richardii* Brid.

Koh Kong, Khemarak Phouminville, on trunks, 2 m, 16-II-1969, Tix. No. 4135. Pantropical.

5. *Leucoloma taylorii* (Schwaegr.) Mitt.

Koh Kong, Sré Ambel Hill, on rotten wood and sandstone, 50 m, 9-XI-1969, Tix. No. 4514.

Ceylon, Burma, Cambodia, Thailand, South Vietnam.

6. *Ochrobryum nepalense* Thér.

Kampot, Kompong Seila, on trunk, near the ground in clear forest, 30 m, 3-V-1968, Tix. No. 3824.

Nepal, Thailand, Cambodia.

7. *Leucobryum candidum* Hook. f. & Wils.

Koh Kong, Khemarak Phouminville, on trunk, 2 m, 5-II-1969, Tix. No. 4318,
 Sré Ambel Hill, on trunksandsandstone, 100 m, 9-XI-1969, Tix. No. 4521.
 From Nepal till New Zealand.

8. *Leucobryum neilgherense* C. Muell.

Koh Kong, Sré Ambel, corticolous in evergreen forest, 20 m, 19-IV-1968, Tix.
 No. 3759.
 India, Ceylon, Sumatra, Java, Sulawesi, Borneo, Tonkin, China, Japan, Korea
 Luzon.

9. *Leucobryum javense* (Brid.) Mitt.

Kampot, Tuk Sap, km 200, on ground in evergreen forest, 10 m, 3-V-1968,
 Tix. No. 3843; idem, km 213, 4-V-1968, Tix. No. 3869; Koh Kong, Sré
 Ambel, on ground in bamboo forest, 10 m, 19-IV-1968, Tix. No. 3769;
 idem, Sré Ambel hill, on sandstone, 100 m, 9-XI-1969, Tix. No. 4512.
 Southern India, Ceylon, Indochina, Yunnan, Hong Kong, Malesia, New Guinea.

10. *Leucobryum scalare* C. Muell.

Kampot, Tuk Sap, km 213, in evergreen forest with *Podocarpus*, on trunk, 10
 m, 4-V-1968, Tix. No. 3870.
 Negros, Panay, Java, Borneo, Thailand, Fiji (a tall form of *L. candidum*?)

11. *Leucophanes octoblepharoides* Brid.

Koh Kong, Sré Ambel, corticolous in damaged forest, 5 m, 19-IV-1968, Tix.
 No. 3773; idem, Kompong Seila, corticolous in clear forest, 10 m, 3-5-
 1968, Tix. No. 3823; idem, Koh Kapic, 2 m, 16-II-1969, Tix. No. 4329.
 From Nepal till Pacific Islands.

12. *Octoblepharum albidum* L.

Koh Kong, Sré Ambel, on trunk in damaged forest, 5 m, 19-IV-1968, Tix. No.
 3560; idem, Sré Ambel Hill, on trunk, 100 m, 9-XI-1969, Tix. No. 4515.
 Pantropical.

13. *Arthrocormus schimperi* Doz. & Molk.

Koh Kong, Sré Ambel, on trunk in bamboo forest, 10 m, 19-IV-1968, Tix.
 No. 3764; Kampot, Tuk Sap, on trunk, in damaged forest, 5 m, 3-V-
 1968, Tix. No. 3834; idem, Sihanoukville, forest behind the motel, 2
 m, 3-V-1968, Tix. No. 3874.

Ceylon, Malaya, Thailand, Borneo, Ambo, Philippines, Queensland, Pacific
 islands.

14. *Syrrhopodon albo-vaginatus* Schwaegr.
 Kampot, Tuk Sap, on rotten wood in damaged forest, 10 m, 3-V-1968, Tix. No. 3829; idem, Sihanoukville, evergreen forest behind the motel, 2 m, 3-V-1968, Tix. No. 3879.

Malaya, Borneo, Moluccas, New Guinea, Fiji, Thailand, Luzon, Mindoro, Panay, Mindanao, Andamans, New Guinea, New Caledonia,

15. *Syrrhopodon croceus* (Mitt.) Fleisch.
 Koh Kong, Sré Ambel, corticolous in damaged forest, 10 m, 19-IV-1968, Tix. No. 3752; Kampot, Tuk Sap, on trunk, 20 m, 3-V-1968, Tix. No. 3837, 3859.

Ceylon, Cambodia, Thailand, Malaya, Natunas, Borneo, Visayas, New Guinea Louisiade, Solomon, Samoa, Fiji, New Caledonia.

16. *Syrrhopodon flammeo-nervis* C. Muell. var. *lilliei* (Broth.) P. Tix. *comb. nov.* (*S. lilliei* Broth. J. Roy. Soc N.S. Wales, 49 : 133, 1916).
 Kampot, Tuk Sap, km 200, on rotten wood in damaged forest, 20 m, 3-V-1968, Tix. No. 3848.
 From Southern India till New Hebrides.

17. *Syrrhopodon rufescens* Hook. & Grev.
 Koh Kong, Sré Ambel, corticolous in damaged forest, 10 m, 19-IV-1968, Tix. No. 3752.

Malaya, Cambodia, Sarawak.

18. *Syrrhopodon spiculosus* Hook. & Grev. var. *elimbatus* (Dix.) P. Tix. *comb. nov.* (*S. elimbatus* Dix., Bull. Torrey Bot. Club, 51 : 280, 1922).
 Kampot, Tuk Sap, km 200, on rotten wood in damaged forest, 20 m, 3-V-1968, Tix. No. 3822.
 Sumatra, Malaya, Thailand.

19. *Calymperopsis semi-liber* (Mitt.) Fleisch.
 Koh Kong, Kompong Seila, on Dipterocarps in clear forest, 15 m, 3-V-1968, Tix. No. 3822.

Southern India, Bangladesh, Burma, Thailand, Vietnam, Cambodia, Hawaii.

20. *Thyridium constrictum* (Sull.) Mitt.
 Kampot, Tuk Sap, on rotten wood in damaged forest, 10 m, 3-V-1968, Tix. No. 3831.

Sumatra, Tenasserim (?), Malaya, Natunas, Borneo, Vietnam, Luzon, Pacific islands till Hawaii.

21. *Thyridium cuspidatum* (Hook. & Grev.) Fleisch.
 Koh Kong, Sré Ambel, corticolous in damaged forest, 10 m, 19-IV-1968, Tix. No. 3766; Kampot, Tuk Sap, km 200, corticolous on rotten, wood, 15 m, 3-V-1968, Tix. No. 3854; idem, Sihanoukville, on rotten wood in evergreen forest behind the motel, 3 m, 3-V-1968, No. 3875.

Java, Malaya, Thailand, Bangladesh, Vietnam.

22. *Thyridium fasciculatum* (Hook. & Grev.) Fleisch.
 Koh Kong, Sré Ambel, corticolous in damaged forest, 10 m, 19-IV-1968, Tix. No. 3750; idem, Kompong Seila, on trunk in clear forest. 15 m, 3-V-1968, Tix. No. 3827.
 Ceylon, Mauritius, Queensland, Malaya, Cambodia, Vietnam, New Guinea, Samoa, Chile.

23. *Thyridium manii* (C. Muell.) Fleisch.
 Koh Kong, Khemarak Phouminville, 2 m, 15-II-1969, Tix. No. 4320; Kampot, Sihanoukville, on trunk in evergreen forest behind the motel, 3 m, 3-V-1968, Tix. No. 3877 (c. fr.)
 Andamans, Malaya, Borneo, Cambodia, Ambon, Louisiade.

24. *Thyridium cardotii* Fleisch.
 Kampot, Tuk Sap, km 200, 20 m, in evergreen forest, 3-V-1968, Tix. No. 3841.
 Java, Cambodia, Burma, Vietnam.

25. *Calymperes gracilescens* Broth.
 Koh Kong, Sré Ambel, corticolous in damaged forest. 10 m, 19-IV-1968, Tix. No. 3751, 3771; idem, Khemarak Phouminville, on trunks, 2 m, 15-II-1969, Tix. No. 4319; idem, Koh Kapic, on trunks, 3 m, 16-II-1968, Tix. No. 4332; Kampot, Tuk Sap, km 200, evergreen damaged forest, 3-V-1968, Tix. No. 3842; idem, km 213, in evergreen damaged forest with *Podocarpus*, 15 m, 4-5-1968, Tix. No. 3862.
 Thailand, Cambodia.

26. *Calymperes donnellii* Aust.
 Koh Kong, Sré Ambel, corticolous in damaged forest, 19-IV-1968, Tix. No. 3775; idem, on rubber-tree, idem, Tix. No. 3779; idem, Sré Ambel hill, on rocks, 100 m, 9-XI-1969, Tix. No. 4519; idem, Khemarak Phouminville, on trunks, 2 m, 15-II-1969, Tix. No. 4321.
 South East Asia and Pacific.

27. *Calymperes robustiusculum* Broth.
 Koh Kong, Sré Ambel hill, on trunk, 100 m, 9-XI-1969, Tix. No. 4525.
 Thailand, Cambodia.

28. *Calymperes serratum* A. Braun ex C. Muell.
 Koh Kong, Sré Ambel, on twigs in secondary forest, 10 m, 19-IV-1968, Tix. No. 3777.
 Malaya, Southern India, Ceylon, Eastern China, Japan, Luzon, Negros, Fiji, New Caledonia.

29. *Hyophila involuta* (Hook.) Jaeg.
 Koh Kong, Koh Kapic, trunks and walls, 2 m, 16-II-1969, Tix. No. 4328, 4330.
 Cosmopolitan.

30. *Bryum coronatum* Schwaegr.
 Koh Kong, Kompong Seila, on ground, 15 m, 3-5-1968, Tix. No. 3825; Kampot,
 Tuk Sap, on ground, 10 m, 3-V-1968, Tix. No. 3830.
 Pantropical.

31. *Rhizogonium spiniforme* (Hedw.) Bruch.
 Kampot, Tuk Sap, on rotten wood in evergreen damaged forest, 10 m, 3-V-1968,
 Tix. No. 3835.
 Pantropical.

32. *Groutiella goniorrhyncha* (Doz. & Molk.) Wjik & Marg.
 Koh Kong, Sré Ambel, on *Ficus* along the river, 2 m, 19-IV-1968, Tix. No.
 3782.
 Khasia Hills, Southern India, Bangladesh, Indochina, Malesia, New Guinea.

33. *Piloeциum pseudo-rufescens* (Hamp.) C. Muell.
 Kampot, Tuk Sap, km 200, on trunk in evergreen forest, 15 m, 3-V-1968, Tix.
 No. 3839; idem, km 213, 100 m, 4-V-1968, Tix. No. 3861.
 Malaya, Cambodia, Sumatra, Borneo, Mindanao, New Guinea, Fiji.

34. *Neckeropsis fimbriata* (Harv.) Fleisch.
 Koh Kong, Sré Ambel, corticolous in wet station, 20 m, 19-IV-1968, Tix. No.
 3767.
 Nepal, Sikkim, Burma, Thailand, Malaya, Vietnam.

35. *Himantocladium plumula* (Nees) Fleisch.
 Koh Kong, Sré Ambel, on twigs in secondary forest, 10 m, 19-IV-1968, Tix.
 No. 3778.
 Indochina, Malesia, New Guinea, New Caledonia.

36. *Acanthocladium alboalare* P. Tix.
 Koh Kong, Sré Ambel, on twigs in damaged forest, 10 m, 19-IV-1968, Tix.
 No. 3754; Kampot, Tuk Sap, km 200, 20 m, on twigs in forest, 3-V-
 1968, Tix. No. 3840; idem, km 213, 100 m, 3-V-1968, Tix. No. 3857.
 Vietnam.

37. *Sematophyllum phaenicum* (C. Muell.) Fleisch.
 Koh Kong, Khemarak Phouminville, on trunk, 2 m, 15-V-1969, Tix. No. 4322;
 idem, Koh Kapic, on trunk, 2 m, 16-V-1969, Tix. No. 4327; idem, Sré
 Ambel, on rubber tree, 3 m, 19-IV-1968, Tix. No. 3780; idem, Kompong
 Seila, on trunk, 15 m, 3-V-1968, Tix. No. 3826.
 Andamans, Bangladesh, Thailand, Cambodia, Vietnam, Foukien.

38. *Acroporium lamprophyllum* Mitt.
 Kampot, Tuk Sap, km 200, on trunk in evergreen forest, 20 m, 3-V-1968, Tix.
 No. 3838; idem, km 213, corticolous in forest with *Podocarpus*, 100 m,
 4-V-1968, Tix. No. 3866.
 Ceylon, Sumatra, Java, Southern Indochina, New Guinea, Samoa, Fiji, New
 Caledonia.

39. *Trichosteleum boschii* (Doz. & Molk.) Jaeg.
 Koh Kong, Sré Ambel, on twigs in bamboo forest, 20 m, 19-IV-1968, Tix. No. 3768; Kampot, Tuk Sap, on rotten wood in evergreen forest, 15 m, 3-V-1968, Tix. No. 3846.
 Malaya, Thailand, Vietnam, Sumatra, Java, Borneo, Fiji.

40. *Trichosteleum brachypelma* (C. Muell.) Jaeg.
 Kampot, Tuk Sap, on trunk in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3847; idem, km 213, corticolous, 100 m, 4-V-1968, Tix. No. 3867.
 Malaya.

41. *Trichosteleum hamatum* (Doz. & Molk.) Jaeg.
 Koh Kong, Sré Ambel Hill, on rotten wood in evergreen forest, 100 m, 9-XI-1969, Tix. No. 4517.
 From Malesia till Pacificislands and Hawaii.

42. *Trichosteleum mammosum* (C. Muell.) Jaeg.
 Koh Kong, Khemarak Phouminville, on trunk, 2 m, 15-II-1969, Tix. No. 4323,
 Malaya, Sumatra, Java.

43. *Trichosteleum singapurense* Fleisch.
 Koh Kong, Sré Ambel, on trunk in damaged evergreen forest, 10 m, 19-IV-1968, Tix. No. 3761; Kampot, Tuk Sap, km 200, 20 m, on trunk in damaged, evergreen forest, 3-V-1968, Tix. No. 3847; idem, km 213, same station, 4-V-1968, Tix. No. 3867; idem, Sihanoukville, corticolous in evergreen forest behind the motel, 2 m, 3-V-1968, Tix. No. 3880.
 Malaya, Southern Cambodia.

44. *Acanthorrhynchium papillatum* (Harv.) Fleisch.
 Koh Kong, Sré Ambel, on trunks near the road, very common, 10 m, 19-IV-1968, Tix. No. 3768; idem, Sré Ambel hill, on trunk, 100 m, 9-XI-1969, Tix. No. 4513; Kampot, Tuk Sap, km 200, on trunks, very common, 20 m, 3-V-1968, Tix. No. 3845; idem, Sihanoukville, on trunk in evergreen forest, 5 m, 3-V-1968, Tix. No. 3872.
 Nepal, Indochina, Malesia, New Guinea, Carolines, Samoa, Fiji, North Queensland.

45. *Taxithelium instratum* (Brid.) Broth.
 Koh Kong, Sré Ambel Hill, on rotten wood on ground, 100 m, 9-XI-1969, Tix. No. 4251.
 Tenasserim, Thailand, Cambodia, Vietnam, Malesia, New Guinea.

46. *Taxithelium nepalense* (Schwaegr.) Broth.
 Koh Kong, Sré Ambel, corticolous in secondary forest, 10 m, 19-IV-1968, Tix. No. 3774; idem, on boulders, 25 m, 9-XI-1969, Tix. No. 4324; Kampot, Sihanoukville, corticolous in evergreen forest, 5 m, 3-V-1968, Tix. No. 3881; Koh Kong, Koh Kapic, on trunks, 2 m, 16-II-1969, Tix. No. 4326.
 Nepal, Indochina, Malesia, Amboin.

47. *Taxithelium* sp.

Koh Kong, Sré Ambel Hill, on rocks, 100 m, 9-XI-1969, Tix. No. 4522.

48. *Isopterygium albescens* (Hook.) Jaeg.

Koh Kong, Sré Ambel Hill, on rotten wood in the ground, 100 m, 9-XI-1969.

India, Ceylon, Indochina, Malesia, Melanesia and Pacific Islands till Hawaii.

II. LIVERWORTS

1. *Bazzania* sp.

Kampot, Tuk Sap, km 213, forest with *Podocarpus*, 100 m, 4-V-1968, Tix. No. 3865.

2. *Bazzania* sp.

Kampot, Tuk Sap, km 200, on trunks and rotten wood in evergreen forest, 20 m, Tix. No. 3856; idem, km 213, forest with *Podocarpus*, 4-V- 1968, Tix. No. 3858.

3. *Plagiochila* sp.

Kampot, Tuk Sap, km 200, 20 m, on twigs in evergreen forest, 3-V-1968, Tix. No. 3852.

4. *Chiloscyphus argutus* Nees

Koh Kong, Sré Ambel, on twigs near the ground in the bed of a dry stream, 20 m, 19-IV-1968, Tix. No. 3770.

Tropical Asia and Oceania.

5. *Radula acuminata* St.

Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3785, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3796, 3797, 3798.

Tropical Asia.

6. *Radula borneensis* St.

Koh Kong, Sré Ambel, corticolous in damaged forest, 20 m, 19-IV-1968, Tix. No. 3772; Kampot, Sihanoukville, corticolous in evergreen forest, 5 m, 3-V-1968, Tix. No. 3876.

Southern India and Indochina, Borneo.

7. *Aphanolejeunea* sp.

Koh Kong, Sré Ambel, epiphyllous in damaged forest, 19-IV-1968, Tix. No. 3713.

8. *Brachiolejeunea sandvicensis* (Gotts.) Ev.
Koh Kong, Koh Kapic, on trunk, 5 m, 16-II-1969, Tix. No. 4331.
Indochina, Malesia, Oceania, China, Japan, Hawaii.
9. *Caudalejeunea reniloba* (Gotts.) St.
Koh Kong, Sré Ambel, on twigs in wet forest, 20 m, 19-IV-1968, Tix. No. 3776.
Java, Cambodia.
10. *Caudalejeunea stephani* (Spr.) St.
Koh Kong, Sré Ambel, on twigs in secondary forest, 20 m, 19-IV-1968, Tix. No. 3776; Kampot, Tuk Sap, km 200, corticolous in dense forest, 3-V-1968, Tix. No. 3850; idem, epiphyllous, Tix. No. 3787, 3788, 3790, 3791, 3792, 3793, 3795, 3796, 3797, 3798.
Tropical Africa and Asia
11. *Cheilolejeunea verdoornii*
Koh Kong, Sré Ambel, on trunk in damaged forest, 20 m, 19-IV-1968, Tix. No. 3752; Kampot, Tuk Sap, epiphyllous in evergreen damaged forest, 20 m, 3-V-1968, Tix. No. 3786, 3787.
Java.
12. *Cololejeunea (Pedinolejeunea) ambelensis* P. Tix. nom. sol.
Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 19-IV-1968, Tix. No. 3713.
Endemic?
13. *Cololejeunea (Taeniolejeunea) amoena* Bx.
Koh Kong, Sré Ambel, epiphyllous in damaged forest, 19-IV-1968, Tix. No. 3711; idem, 9-XI-1969, Tix. No. 4491.
Southern Indochina, Malaya, Java, South Mindanao.
14. *Cololejeunea (Pedinolejeunea) bolombensis* (St.) Vand. Berg.
Koh Kong, Sré Ambel Hill, 100 m, epiphyllous in evergreen forest, 9-XI-1969, Tix. No. 4501 to 4510.
From Western Africa to New Caledonia.
15. *Cololejeunea (Pedinolejeunea) ceratilobula* (Chen) P. Tix. comb. nov. (*Leptocolea ceratilobula* Chen, Fed. Rep., 58,1/3:149, 1959).
Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3786; idem, Sihanoukville, evergreen forest behind the motel, 5 m, 3-V-1968, Tix. No. 3810.
China, Southern Indochina, Malaya, Java.

16. *Cololejeunea (Taeniolejeunea) falcata* (Horik.) Bx.
Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-1968, Tix. No. 3710.
From Ceylon till Formosa and New Caledonia.
17. *Cololejeunea (Lasiolejeunea) goebelii* (Gotts. ex Schiffn.) Mizut.
Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968,
Tix. No. 3794.
Indochina, China, Japan, Formosa, Java.
18. *Cololejeunea (Taeniolejeunea) floccosa* (L. & L.) St.
Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-1968, Tix. No. 3713.
Sierra Leone, Madagascar, Ceylon, Indochina, Southern China, Formosa, Riu Kiu, Japan, Malaya, Sumatra, Java, Borneo, Philippines, Chittagong, New Caledonia.
19. *Cololejeunea (Lasiolejeunea) minuta* (Mitt.) St.
Koh Kong, Sré Ambel, epiphyllous in evergreen forest, 20 m, 19-IV-1968, Tix. No. 3734.
Andamans, Indochina, China, Japan, Formosa, Philippines, New Caledonia.
20. *Cololejeunea (Lasiolejeunea) tuksapensis* P. Tix.
Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968,
Tix. No. 3790.
Endemic ?
21. *Cololejeunea (Lasiolejeunea) schmidtii* (St.) P. Tix.
Koh Kong, Sré Ambel, epiphyllous in damaged forest, 19-IV-1968, Tix. No. 3712; idem, 9-XI-1968, Tix. No. 4491, 4492, 4493.
Thailand, Vietnam, Cambodia, Laos.
22. *Cololejeunea (Taeniolejeunea) siamensis* (St.) Bx. (*Cololejeunea pluripunctata* Bx., Fed. Rep., 44:134, 1953).
Koh Kong, Sré Ambel, epiphyllous in damaged forest, 19-IV-1968, Tix. No. 3712; Kampot, Tuk Sap, same station, 20 m, 3-V-1968, Tix. No. 3785, 3794.
Cambodia, Malaya, Sarawak.
23. *Cololejeunea (Lasiolejeunea) tenella* Bx.
Koh Kong, Sré Ambel, epiphyllous in evergreen forest, 20 m, 9-XI-1969, Tix. No. 4493; Kampot, Tuk Sap, epiphyllous in evergreen forest, 20 m, 3-V-1968, Tix. No. 3785, 3787, 3794.
Western Sumatra, Malaya, Java, Vietnam.

24. *Colura acroloba* S.J.A.

Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968,
Tix. No. 3785, 3720, 3730, 3788, 3796, 3798, 3801.

From Ceylon to New Caledonia.

25. *Colura conica* (Sde. Lac.) Grolle

Koh Kong, Sré Ambel, epiphyllous in evergreen forest, 19-IV-1968, Tix. No.
3719, 3728, 3738, 3746; Kampot, Tuk Sap, epiphyllous in damaged
evergreen forest, 20 m, 3-V-1968, Tix. No. 3788, 3797, 3798, 3801.

South East Asia.

26. *Colura corynephora* (Nees) Trevisan

Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-
IV-1968, Tix. No. 3711, 3730, 3738; Kampot, Tuk Sap, same station, 20
m, 3-V-1968, Tix. No. 3785.

Java, Borneo, Philippines, New Guinea, New Caledonia.

27. *Drepanolejeunea micholitzii* Herz. var. *dactylophoroides* Herz.

Koh Kong, Sré Ambel, epiphyllous in evergreen damaged forest, 20 m, 19-IV-
1968, Tix. No. 3719; Kampot, Tuk Sap, epiphyllous in damaged
evergreen forest, 20 m, 3-V-1968, Tix. No. 3787, 3788, 3790, 3795,
3796, 3798.

Borneo, Vietnam, New Caledonia.

28. *Drepanolejeunea tenuis* (Nees) Schiffn.

Koh Kong, Khemarak Phouminville, on trunk, 2 m, 16-II-1969, Tix. No. 4325;
Kampot, Sihanoukville, corticolous in evergreen forest behind the
motel, 5 m, 3-V-1968, Tix. No. 3877.

Java, Sumatra, Philippines, Vietnam, Cambodia, Malaya, New Caledonia.

29. *Drepanolejeunea* sp.

Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968,
Tix. No. 3786.

30. *Lejeunea* sp.

Koh Kong, Sré Ambel, on trunk in damaged forest, 19-IV-1968, Tix. No. 3751.

31. *Leptolejeunea epiphylla* (Mitt.) St.

Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-
1968, Tix. No. 3721; Kampot, Tuk Sap, same station, 20 m, 3-V-1968,
No. 3786, 3788, 3787, 3791, 3794, 3795, 3798.

From western Africa to Pacific.

32. *Leptolejeunea picta* Herz.

Koh Kong, Tuk Sap, km 213, epiphyllous in damaged evergreen forest, 100 m, 4-V-1968, Tix. No. 3818.

Sumatra, Cambodia, Malaya, Borneo, New Caledonia.

33. *Leptolejeunea subacuta* St.

Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-1968, Tix. No. 3715; Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3786, 3787, 3788, 3791, 3792, 3793, 3794, 3795.

Southern Indochina and western Malesia.

34. *Leptolejeunea vitrea* (Nees) St.

Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-1968, Tix. No. 3710; Kampot, Tuk Sap, same station, 20 m, 3-V-1968, Tix. No. 3788, 3792, 3796, 3798.

Tropical Africa, Mascarhenas, Ceylon, Indochina, Malesia, Melanesia.

35. *Leptolejeunea* sp.

Kampot, Tuk Sap, epiphyllous in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3792.

36. *Lopholejeunea eulopha* (Tayl.) Spr.

Koh Kong, Kompong Seila, km 144, in clear forest on trunk, 3-V-1968, Tix. No. 3828; Kampot, Sihanoukville, in evergreen forest behind the motel, 2 m, 3-V-1968, Tix. No. 3883.

Nicobar, Sumatra, Malaya, Java, Borneo, Luzon, New Guinea, Queensland, New Caledonia, Samoa, Tahiti.

37. *Lopholejeunea subfuscata* (Nees) St.

Koh Kong, Sré Ambel, on trunk of rubber tree, 2 m, 19-IV-1968, Tix. No. 3781. Asia and Australasia.

38. *Mastigophora humilis* (Gotts.) Schiffn.

Koh Kong, Koh Kapic, 2 m, on trunk, 16-II-1969, Tix. No. 4324.

From Ceylon to Tahiti.

39. *Microlejeunea cucullata* (Nees) St.

Koh Kong, Sré Ambel, epiphyllous in damaged evergreen forest, 20 m, 19-IV-1968, Tix. No. 3712; Kampot, Tuk Sap, epiphyllous in damaged evergreen forest 3-V-1968, Tix. No. 3790.

Tropical Asia and Oceania.

40. *Pycnolejeunea nicobarica* (St.) Mizut.

Koh Kong, Sré Ambel, corticolous in evergreen forest, 20 m, 19-IV-1968, Tix. No. 3763; Kampot, Tuk Sap, on twigs in damaged evergreen forest, 20 m, 3-V-1968, Tix. No. 3853.

Nicobar, Southern Indochina.

41. *Pycnolejeunea punctata* St.

Koh Kong, Pich Nil, on bark in forest, km. 101, 100 m, 10-V-1967, Tix. No. 2613; Kampot, Sihanoukville, on bark in evergreen forest behind the motel, 2 m, 3-V-1968, Tix. No. 3878.

Bismarck archipelago.

42. *Thysananthus aculeatus* Herz.

Kampot, Tuk Sap, km 200, on twigs in evergreen forest, 3-V-1968, Tix. No. 3855; idem, km 213, 100 m, same station, 4-V-1968, Tix. No. 3859, 3864.

Indochina, Japan, Riu Kiu, Formosa, Philippines.

43. *Thysananthus spathulistipus* (Reinw. Bl. Nees.) Bl.

Kampot, Tuk Sap, on twigs in evergreen forest, 20 m, 3-V-1968, Tix. No. 3835.

From Madagascar till Pacific Ocean.

44. *Frullania* sp.

Kampot, Tuk Sap, km 213, 100 m, on twigs in forest with *Podocarpus*, 3-V-1968, Tix. No. 3860, 3871.

45. *Frullania* sp.

Kampot, Tuk Sap, km 200, on twigs in damaged evergreen forest, 3-V-1968, Tix. No. 3850.